WHAT IS CLAIMED IS:

1. A rotor assembly comprising:

a rotor forging including a rotor body having pole faces;

a winding module including a plurality of field windings positioned adjacent the pole faces and a winding insulator disposed, respectively, between each pair of successive field windings, respectively; and

a winding block disposed in engagement with the winding module and shaped to be shifted to a final position relative to the winding module when the rotor assembly rotates at about its rated speed to thereby compress the winding module.

2. A rotor assembly according to claim 1, wherein the winding block comprises a tapered surface engaging the winding module.

3. A rotor assembly according to claim 2, wherein the tapered surface friction coefficient is selected such that the winding block is shifted to the final position relative to the winding module when the rotor assembly rotates at about its rated speed.

4. A rotor assembly according to claim 1, wherein the winding block is formed of a flexible insulating material.

5. A rotor assembly according to claim 1, wherein the winding block is fixed in its position on the rotor assembly, and wherein the winding module is displaced across the winding block when the rotor assembly rotates at about its rated speed.

6. A multi-pole electric machine rotor assembly comprising:

a rotor forging including a rotor body having poles directed along a direct axis with pole faces extending generally perpendicularly to a direct axis, and fins extending along a quadrature axis;

a winding module including a plurality of field windings positioned in spaces between the pole faces and the fins, and a winding insulator disposed between each successive pair of the field windings, respectively; and

a winding block disposed between the winding module and a corresponding one of the fins in each respective one of the spaces between the pole faces and the fins.

7. A rotor assembly according to claim 6, wherein the winding block is movably detached from the fins and the winding module.

8. A rotor assembly according to claim 7, wherein the winding block comprises a support surface engaging the corresponding one of the fins and a tapered surface engaging the winding module.

9. A rotor assembly according to claim 8, wherein the tapered surface angle is selected such that the winding block is shifted to a final position when the rotor assembly rotates at about its rated speed.

10. A rotor assembly according to claim 9, wherein the tapered surface friction coefficient is selected such that the winding block is shifted to a final position when the rotor assembly rotates at about its rated speed.

11. A rotor assembly according to claim 6, wherein the winding block comprises a support surface engaging the corresponding one of the fins and a tapered surface engaging the winding module.

12. A rotor assembly according to claim 11, wherein the tapered surface angle is selected such that the winding block is shifted to a final position when the rotor assembly rotates at about its rated speed.

13. A rotor assembly according to claim 12, wherein the tapered surface friction coefficient is selected such that the winding block is shifted to a final position when the rotor assembly rotates at about its rated speed.

14. A rotor assembly according to claim 6, wherein the winding block is formed of a flexible insulating material.